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ABSTRACT

This report discusses the outcomes of a study that examined the use of accommodations in state assessment by students with disabilities and explored several related factors. A survey of states indicated 12 states (Florida, Indiana, Kansas, Kentucky, Massachusetts, Maryland, Nevada, New York, Pennsylvania, Rhode Island, South Dakota, and West Virginia), collected data on the number of students with disabilities using accommodations in their state assessments. Analyses found that, in general, there is a downward trend in the percentage of students using accommodations across grades. For the 16 tests with data on percentages of students using accommodations for at least 3 grades, 11 show a downward trend in percentages across school levels; 2 additional ones show a downward trend from elementary to middle school but minimal differences between middle and high school. Thus, a downward trend either across 2 or 3 of the 3 school levels is evident in over 95 percent of the possible comparisons. The extremely variable rates in accommodations use (8-82 percent) indicated that in some states more accommodations are being used than in others. The use of specific accommodations is discussed, and the need for better methods of recording accommodations use is emphasized. (Contains 32 references.) (CR)

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Technical Report 30

Use of Accommodations in State Assessments: What Databases Tell Us About Differential Levels of Use and How to Document the Use of Accommodations

Martha L. Thurlow

August 2001

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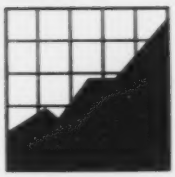

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Executive Summary

Since the enactment of IDEA 97, students with disabilities are being included in state and district assessments more than ever before, often with accommodations designed to give them access to the test. In the past, most states did not collect data on the use of accommodations. This is changing. As part of its most recent survey of states, the National Center on Educational Outcomes found that data were available from 12 states on the number of students using accommodations during state assessments. The extremely variable rates in accommodations use (8-82%) indicated that in some states more accommodations are being used than in others; still there was some relationship of accommodations use to level of schooling (elementary, middle, high school). Publicly reported data on accommodations use are unique to each state, making other comparisons difficult. Further study of how data on the use of accommodations are collected in states points to concerns about the accuracy of information and possibly the need for better methods for recording accommodations use.

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Overview

For some time now, the participation of students with disabilities and students with limited English proficiency in national, state, and district assessments has been a topic of considerable discussion and research effort, to the point that the National Research Council formed committees and conducted studies to address the issues (e.g., August & Hakuta, 1999; McDonnell, McLaughlin, & Morison, 1997). These and numerous other efforts were aligned with federal initiatives that require the participation of students with disabilities (both IDEA 97 and Title I of IASA 94) and students with limited English proficiency (Title I of IASA 94) in state and district assessments.

Accommodations frequently are cited as one of the key avenues for increasing the participation of students with disabilities in national and state assessments (Anderson, Jenkins, & Miller, 1996; Elliott, & Thurlow, 2000; Mazzeo, Carlson, Voekl, & Lutkus, 2000; Stancavage, McLaughlin, Vergun, Godlewski, & Allen, 1996; Thurlow, Elliott, & Ysseldyke, 2000). Generally defined, accommodations are changes in testing materials or procedures that allow students to show their knowledge and skills rather than the effects of disability or limited English proficiency. While there are a variety of other terms in use (e.g., adaptation, modification), some of which may mean the same thing and others of which may define the comparability or acceptability of a given change (Elliott, Thurlow, Ysseldyke, & Erickson, 1997), the essence of the concept is that either the materials or the procedures of testing have changed. In this paper, I use "accommodations" as a generic term to cover all types of testing changes.

Although the importance of accommodations for both students with disabilities and English language learners is now recognized, the requirement that accommodations be provided has a much longer history for students with disabilities, a history entwined with the law (Section 504 of the 1993 Rehabilitation Act, Americans with Disabilities Act, IDEA). For the past decade, the National Center on Educational Outcomes (NCEO) has examined the issues surrounding the participation of students with disabilities in large-scale assessments.

All states now have written policies guiding the provision of assessment accommodations for students with disabilities (Thurlow, House, Boys, Scott, & Ysseldyke, 2000). Indeed, assessment directors are much more cognizant of their policies on assessment accommodations (Olson, Bond, & Andrews, 1999), and many states are conducting or participating in research on the effects of accommodations. Although our knowledge about what accommodations are allowed in states and which are most controversial has increased dramatically (see Thurlow & Bolt, in press-a), as has our recognition of the research that has been conducted on a variety of test changes (Thurlow & Bolt, in press-b; Tindal & Fuchs, 2000), this information tells us nothing about the extent to which accommodations are used, nor about the specific accommodations that are used most frequently.

The purpose of the present paper is to examine the use of accommodations in state assessments by students with disabilities, and to explore several related factors. Five primary topics are addressed:

1. To what extent do states have data on the use of assessment accommodations by students with disabilities during state assessments?
2. How variable is the use of assessment accommodations during state assessments by students with disabilities across states?
3. What information exists on the use of specific accommodations?
4. What data are reported publicly on accommodations used during state assessments?
5. How do states collect data on the use of assessment accommodations by students with disabilities?

State Data on the Number of Students with Disabilities Using Assessment Accommodations

Background

Data collected in the past from states' written policies on assessment accommodations (Thurlow, Ysseldyke, & Silverstein, 1993; Thurlow, Scott, & Ysseldyke, 1995; Thurlow, Seyfarth, Scott, & Ysseldyke, 1997; Thurlow, House, Boys, Scott, & Ysseldyke, 2000), as well as information collected from surveying state assessment directors (Olson, Bond, & Andrews, 1999; Roeber, Bond, & Braskamp, 1997; Roeber, Bond, & Connealy, 1998) consistently indicate that the most frequently allowed accommodations across states are (1) large print, (2) Braille, and (3) reading directions. However, a look at the distribution of disability categories among the school-age population (U.S. Department of Education, 2000) suggests that these probably are not the most frequently used accommodations. Most students have learning disabilities, speech and language impairments, emotional or behavioral disabilities, and mental retardation, *not* visual disabilities, as the most frequently allowed accommodations might suggest.

To better understand the use of assessment accommodations, it is important to look at the extent to which states have data on the use of accommodations by students with disabilities during state assessments. Further, it is important to look at the extent to which students with disabilities are using accommodations during state assessments.

Data Source

Data on the use of accommodations were collected through a survey conducted by NCEO during 1999 (Thompson & Thurlow, 1999). State directors of special education, or their designees, in the 50 states were asked to indicate whether their state assessment systems collected data on the use of accommodations during assessments, and if so, to indicate the percentage of students using accommodations for each state test.

Results

Twelve states indicated that they collected data on the number of students with disabilities using accommodations in their state assessments. Further, they each supplied the actual percentage of students with disabilities using accommodations in their state assessments, for the grade levels in which they were administered. For summary purposes here, the percentages are averaged and grouped in Table 1 according to the level of school (elementary, middle, and high school).

As is evident in Table 1, all 12 states had data available at the elementary level, while only 11 did at the middle school level, and only 9 did at the high school level. The cells without data in Table I correspond to the school levels for which accommodations data were not available in Maryland, New York, and West Virginia.

In general, there is a downward trend in the percentage of students using accommodations across grades. For the 16 tests with data on percentages of students using accommodations for at least three grades, 11 show a downward trend in percentages across school levels; 2 additional show a downward trend from elementary to middle school, but minimal difference between middle and high school. Thus, a downward trend either across two or three of the three school levels is evident in over 95% of the possible comparisons. In the other three cases where three levels of data were available on the same test, the trends in percentages of students using accommodations show upward trends from elementary to middle to high school; two of the three cases are from one state (Indiana) while the other is from Rhode Island.

An examination of the relative levels of the percentages of students using accommodations also is of interest. Table 2 summarizes the state data in terms of the approximate percentage of students using accommodations at each school level. There are several states that hover consistently at either the lower, middle, or higher ranges of percentages. For example, Kansas is consistently within the lowest three percentage levels, regardless of school level. Only two states stay consistently above the 50% level, regardless of school level (Kentucky and Pennsylvania). Four states hover around the 40-60% range for at least two of the school levels (Nevada, Pennsylvania, Rhode Island, South Dakota).

Table 1. State-reported Levels of Use of Accommodations

State	Assessment/ Subject Area	Elementary Grades (K-5)	Middle School Grades (6-8)	High School Grades (9-12)
Florida	FL Writing Assessment FCAT (Reading) FCAT (Math)	51%(Gr 4) 47% (Gr 4) 50% (Gr 5)	39% (Gr 8) 38% (Gr 8) 38% (Gr 8)	34% (Gr 10) 40% (Gr 10) 39% (Gr 10)
Indiana	Statewide Assessment - Math English/Language Arts	28% (Gr 3) 29% (Gr 3)	34% (Gr 6) 38% (Gr 8) 34% (Gr 6) 38% (Gr 8)	80% (Gr10) 82% (Gr 10)
Kansas	KS Assessment Program – Math Reading Writing	21% (Gr 4) 19% (Gr 3) 23% (Gr 5)	14% (Gr 7) 13% (Gr 7) 17% (Gr 7)	08% (Gr 10) 08% (Gr 10) 09% (Gr 10)
Kentucky	Kentucky Core Content Test	82% (Gr 4) 82% (Gr 5)	72% (Gr 7) 70% (Gr 8)	50% (Gr 10) 57% (Gr 11) 55% (Gr 12)
Massachusetts	Comprehensive Assessment System	61% (Gr 4)	38% (Gr 8)	25% (Gr 10)
Maryland	MSPAP - Reading Language Usage Math	53% (Gr 3) 51% (Gr 5) 44% (Gr 3) 41% (Gr 5) 20% (Gr 3)	25% (Gr 8) 16% (Gr 8)	
Nevada	Terra Nova Complete Battery	51% (Gr 4)	42% (Gr 8)	44% (Gr 10)
New York	PEP Test – Reading Math Writing	50% (Gr 3) 31% (Gr 3) 33% (Gr 5)	50% (Gr 6) 32% (Gr 6)	
Pennsylvania	Reading and Math Assessment	67% (Gr 5)	52% (Gr 8)	45% (Gr 11)
Rhode Island	Writing Performance Assessment Health Performance Assessment	49% (Gr 3) 39% (Gr 5)	55% (Gr 7) 61% (Gr 9)	60% (Gr 10)
South Dakota	Stanford Achievement Test (Language, Math, Reading, Science, Social Science)	63% (Gr2) 67% (Gr 4)	59% (Gr 8)	46% (Gr 11)
West Virginia	SAT 9 – Language, Math, Reading, Science, Social Studies	64% (Gr 3-11)		

From Thompson & Thurlow (1999), Table 7 - Percent of Students Receiving Special Education Services Who Used Testing Accommodations, reprinted with permission of the National Center on Educational Outcomes.

Table 2. Approximate Percentages of Students with Disabilities Using Accommodations at Each School Level

Percentage	School Level		
	Elementary	Middle	High School
0 – 10%			Kansas
11 – 20%		Kansas Maryland	
21 – 30%	Kansas Indiana		Massachusetts
31 – 40%	New York	Florida Indiana Massachusetts	Florida
41 – 50%	Florida Maryland Rhode Island	Nevada New York	Nevada Pennsylvania South Dakota
51 – 60%	Nevada	Pennsylvania Rhode Island South Dakota	Kentucky Rhode Island
61 – 70%	Massachusetts Pennsylvania South Dakota		
71 – 80%		Kentucky	
81 – 90%	Kentucky		Indiana
91 – 100%			

Note: West Virginia is not included in this table because its data were combined across all grades (3-11). In addition, Maryland and New York are not included in the high school column because they did not have data at that school level.

Use of Specific Accommodations

Background

With the apparent increase in use of accommodations during state and district assessments, there is interest not only in how many students are using accommodations, but also in exactly which accommodations are being used. This information will help us understand not only which specific accommodations are used most, but also the extent to which combinations of accommodations are used.

Data Sources

Three states that have collected data on specific accommodations that are used by students with disabilities have either analyzed or supplied data on accommodations to NCEO to analyze – Kentucky (Trimble, 1998), Rhode Island (Elliott, Bielinski, Thurlow, DeVito, & Hedlund, 1999), and Missouri (Bielinski, Ysseldyke, Bolt, Friedebach, & Friedebach, in press). The findings of these studies are presented here, and the results examined in relationship to each other and to

contextual characteristics of the states. Each of these states has slightly different accommodations policies.

Kentucky is a state with relatively broad accommodations policies. Districts are instructed that assessment accommodations should be aligned with instructional accommodations – those accommodations used during instruction may be used during assessment. The exception is that reading the test aloud to students is not appropriate when the test is a measure of reading decoding skills.

Rhode Island is one of a handful of states that allows accommodations for all students. Students or their teachers must be able to demonstrate need for a specific accommodation before it can be incorporated into the testing procedures for the student. As a result of this uniquely inclusive approach to accommodations, Rhode Island has important data about the numbers of students with and without disabilities using accommodations.

Missouri initiated its new Communication Arts assessment in 1998. Missouri coded the specific accommodations used by students on bubble sheets at the time of testing; also coded for these students was the student's category of disability and the disability area (math, reading, behavior). As a result of the richness of its information, Missouri has important data about the numbers of students with specific disabilities who used accommodations during state testing.

Results

The data on specific accommodations used during statewide assessment are collected in slightly different ways in each state, which in turn affects the kind of information available on use of accommodations during testing. Therefore, each state is presented separately here, with some indication of how data on accommodations used were collected.

Kentucky. Although Kentucky's accommodation policies have been in place since 1992, it did not begin coding accommodations used during assessments until 1994-95. For coding purposes, Kentucky groups its accommodations into seven categories:

- **Reader/Oral**. The assessment is read to the student in a way comparable to the manner in which normal instruction is delivered.
- **Scribe/Dictation**. The responses to the assessment are dictated by the student and written down by a scribe in a way comparable to the manner in which normal instruction is delivered.
- **Cueing**. The student with disabilities uses mnemonics, problem-solving organizers,

semantic organizers, webs, or templates in responding to the assessment in a way consistent with daily instruction and the student's IEP or 504 Plan.

- **Paraphrasing**. The content of the assessment is paraphrased for the student with disabilities in a way comparable to the manner in which normal instruction is delivered.
- **Interpreter**. The content of the assessment is signed for the student with disabilities in a way comparable to the manner in which normal instruction is delivered.
- **Technological**. Technology typically used by the student with disabilities in daily instruction is made available during the administration of the assessment.
- **Other**. Other accommodations normally made available in the delivery of instruction are made available in the administration of the assessment. (Trimble, 1998, pp. 23-24)

According to the 1999 NCEO survey data (see Table 1), Kentucky is one of the states with the highest percentage of students using accommodations during state testing (50–82%). The analysis of specific accommodations used during two earlier testing years (Trimble, 1998) indicated that across all students using accommodations, the most frequently used accommodations were (not necessarily in order): Reader/Oral, Scribe/Dictation, Paraphrasing, Oral & Scribe/Dictation, Paraphrasing & Reader/Oral & Scribe/Dictation, Paraphrasing & Reader/Oral & Other, Paraphrasing & Reader/Oral & Technology & Scribe/Dictation. Clearly, many students used combinations of accommodations rather than a single accommodation. The percentages of students using each of the most frequently used accommodations and combinations of accommodations during 1995-96 are presented in Table 3.

Table 3. Estimated Percentages of Students in Kentucky Using Specific Accommodations

Accommodation	Grade		
	4	8	11/12
Reader/Oral	7.71	12.42	7.74
Scribe/Dictation	2.51	----	----
Paraphrasing	2.51	8.72	12.98
Reader/Oral & Scribe/Dictation	18.65	3.92	----
Paraphrasing & Reader/Oral	10.63	25.06	26.88
Paraphrasing & Reader/Oral & Scribe/Dictation	33.30	10.12	----
Paraphrasing & Reader/Oral & Other	----	----	----
Paraphrasing & Reader/Oral & Technology & Scribe/Dictation	2.16	----	----

Note: The percentages in this table are estimated from the 1995-96 numbers presented by Trimble (1998) in Table 7 (accommodations use) and in Table 3 (number of students participating in assessment). Cells with less than 100 students were not estimated. The numbers in this table are considered to be estimates because it is possible that there were discrepancies in coding the number of students actually using specific accommodations or combinations, as well as some variation in the actual number of students participating in the assessment.

The data in Table 3 support NCEO's finding that the percentage of students using accommodations decreases across grades (Thompson & Thurlow, 1999). In addition, the data in Table 4 suggest that combinations of accommodations are used by larger numbers of students than are single accommodations: in grade 4, the largest percentage of students used the Paraphrasing & Reader/Oral & Scribe/Dictation, while in both grade 8 and grades 11/12, the largest percentages of students used Paraphrasing & Reader/Oral.

Rhode Island. The policy of allowing any student for whom the need for an accommodation could be demonstrated to use the accommodation during testing began during the 1995-96 school year, at the same time that the state first administered new performance assessments in Grade 4 mathematics, writing, and health education. At that time, Rhode Island had a list of several dozen accommodations that could be used by students.

According to the 1999 NCEO survey data (see Table 1), Rhode Island is a state with moderate percentages of students using accommodations during state testing (39-61%). The analysis of Rhode Island's data revealed that while students *without* disabilities most often used just one accommodation, students *with* disabilities most often used between one and four accommodations (Elliott, Bielinski, Thurlow, DeVito, & Hedlund, 1999).

Table 4 presents the percentages of students with and without disabilities using each of the most frequently used accommodations and combinations of accommodations. These data show that relatively small percentages of students without disabilities used accommodations; the largest percentage of these students used the timing accommodation. For students with disabilities, the percentage of students using timing only was comparable to the percentage of students without disabilities using timing. However, there were other accommodations used by percentages of students with disabilities that were just as high (Oral & Repeated Directions), and a couple of combinations of accommodations that had much higher percentages of students with disabilities using them (Oral & Repeated Directions & Setting; Oral & Repeated Directions & Setting & Response).

Table 4. Estimated Percentages of Students in Rhode Island Using Specific Accommodations

Accommodation	Students with Disabilities	Students without Disabilities
Oral Presentation	1.62	0.81
Timing	3.01	3.89
Oral & Repeated Directions	3.17	0.92
Oral & Repeated Directions & Setting	9.03	0.22
Oral & Repeated Directions & Setting & Response	7.80	0.25

Note: The percentages in this table are estimated from 1995-96 numbers presented in Table 6 by Elliott et al. (1999). They are considered estimates because there may have been discrepancies in coding the number of students actually using specific accommodations or combinations, as well as some variation in the actual number of students participating in the assessment.

Missouri. In Missouri a list of about two dozen accommodations was in place during the 1998 testing. IEP teams decided which accommodations students would use, and then marked these on a Student Information Form, which also contained information on the student's disability category and area of disability.

Missouri did not provide data to NCEO's 1999 survey on the percentage of students using accommodations during state testing. However, Bielinski, Ysseldyke, Bolt, Friedebach, and Friedebach provided data on the percentages of students with disabilities who had valid test scores using accommodations in grade 3 (53%), grade 7 (53%), and grade 11 (33%). These data indicate that greater percentages of students use accommodations in elementary and middle school than in high school. Table 5 shows the percentages of students with various disabilities using the four most frequently used accommodations and combinations of combinations. These data were not broken down by grade by Bielinski et al. (in press).

Table 5. Estimated Percentages of Students in Missouri Using Specific Accommodations

Accommodation	Disability				
	Learning Disability	Speech/ Language Disability	Mental Retardation	Emotional Behavior Disability	Sensory/ Physical Disability
Small Group	10	9	10	20	8
Small Group & Read Aloud	16	13	11	10	9
Small Group & Read Aloud & Extended Time Each Session	11	11	11	6	8
Small Group & Read Aloud & Extended Time Multiple Choice and Dictation	29	38	30	16	23

Note: The percentages in this table are directly from Table 1 in Bielinski, Ysseldyke, Bolt, Friedebach, and Friedebach (in press), and are based on only those students who received valid scores on the Missouri Comunications Arts test.

Publicly Reported Data on Accommodations

Background

When the Individuals with Disabilities Education Act (IDEA) was reauthorized in 1997, it included a requirement that states report on the number of students with disabilities included in state and district testing, and the performance of students on those tests in the same way and with the same frequency as they did for students without disabilities. NCEO started tracking public education reports in 1997 (Thurlow, Langenfeld, Nelson, Shin, & Coleman, 1998; Thurlow, Nelson, Teelucksingh, & Ysseldyke, 2000; Ysseldyke, Thurlow, Langenfeld, Nelson, Teelucksingh, & Seyfarth, 1998). These reports revealed that few states reported any information about students with disabilities other than enrollment data. Those that did report on the

performance of students with disabilities often did not make clear whether they had included only those who took the assessments in the standard way, or had also included students who used some kind of accommodation.

Of the 13 states that provided some type of test data in 1998, Ysseldyke et al. (1998) found that only Delaware included any information on the use of accommodations. Delaware reported that "of the 3,395 special education students who took the test, 1,033 had some type of accommodation and 2,362 tested with no accommodation" (Delaware State Department of Education, 1997, p. 25). This indicates that about 30% of students with disabilities in Delaware used accommodations.

Oregon provided combined data on the numbers and percentages of students who took the 1993-94 reading assessment with modifications or who were exempt (Oregon Department of Education, 1997, p. 52). It is not possible to separate modifications from exemptions. Further, the use of the term "modifications" suggests that the report is focusing on the number of students whose results were not being reported. How many students used accommodations that were considered acceptable and thus were included in aggregate scores cannot be determined.

When another review of state reports was conducted in 1999 (Thurlow, Nelson, Teelucksingh, & Ysseldyke, 2000), 13 states (but not necessarily the same ones as in 1998) provided test-based data on students with disabilities; 12 provided participation data. Only South Dakota provided information about accommodations use (South Dakota Department of Education and Cultural Affairs, 1999). South Dakota disaggregated the scores for students who took the test under standard conditions, standard accommodations, and with nonstandard accommodations. In a report that was released after NCEO's data collection period, North Carolina provided data on the numbers of students using modifications for its Tests of Computer Skills for the classes of 2001 and 2002 (State Board of Education, 1999). In North Carolina, "modifications" is the term used for both acceptable and not acceptable changes in testing conditions:

> Students with disabilities or students who are Limited English Proficient may take tests under modified conditions provided the modifications are documented and do not violate the validity of the tests. Modifications are used routinely during classroom instruction. (State Board of Education, 1999, p. xi)

For both groups of students in the North Carolina report, the most frequently used "modifications" were extended time (approximately 42%), separate room testing (approximately 42%), and administrator reads test aloud (approximately 26%). It is not possible to determine from the North Carolina report how many students overall received accommodations because data are reported by total number of accommodations used and the number of each specific accommodation used.

Data Source

An analysis is again underway at NCEO. This time we are scanning all states' Web sites as well as actual reports that they print. Data on the use of accommodations during state testing were found for six states (Colorado, Indiana, Louisiana, Kentucky, Nevada, and South Dakota).

Results

Colorado provided numerous data summaries on its Web site (http://www.cde.state.co.us/). It provides the number of students using each accommodation, but does not distinguish between whether the students have IEPs, 504 plans, or neither (Colorado allows accommodations for all students based on documented need). Without a disability-based numerator and denominator, it is possible only to look at the relative use of specific accommodations in relation to the total number of students. Nevertheless, it is interesting to look at Colorado's data because of its comprehensiveness (see Table 6). Two accommodations stand out as the most frequently used—timing changes (extended or modified) and oral presentation.

Table 6. Percentage of All Colorado Students Receiving Accommodations*

Accommodation	Gr 3 Reading	Gr 4 Reading	Gr 4 Writing	Gr 7 Reading	Gr 7 Writing	Gr 8 Math*	Gr 8 Science*
Braille	.06	.04	.01	.08	.03	.10	.05
Large Print	.05	.06	.03	.03	.01	.08	.06
Oral Presentation	2.14	2.51	2.67	2.88	2.92	3.10	3.18
Scribe	.72	.77	.84	.31	.46	.24	.24
Signing	.06	.05	.06	.06	.06	.06	.06
Asst Commun Dev	.03	.02	.03	.01	.03	.01	.01
Timing Changes	6.28	10.21	7.80	4.00	3.89	3.25	2.12

Note: These numbers are estimates based on the total number of students tested and the number of students using each accommodation.
* An additional accommodation, "use of number line" was used by .03% of all students for math and by .03% of all students for science.

Indiana provided data on its Web site (http://doe.state.in.us/istep/) on the percentage of special education students and the percentage of 504 students who received accommodations during its statewide testing in 2000. These data are summarized in terms of percentages in Table 7. The increase in percentage of students using accommodations noted in earlier data (Thompson & Thurlow, 1999) again is evident in Indiana's data.

Kentucky also provided general data on the use of accommodations by students with disabilities, but did not make a distinction between different content areas; Kentucky's Spring 2000 data,

Table 7. Percentages of Indiana Special Education Students Using Accommodations

Assessment	Grade 3	Grade 6	Grade 8	Grade 10
English Language Arts	56.24	77.75	77.84	84.42
Mathematics	54.45	76.38	77.24	85.41

obtained from its Web page (http://www.kde.state.ky.us/oaa/implement/) are for its norm-referenced test only (CTBS/5). The percentage of students with disabilities using accommodations at the end of primary, and in grades 6 and 9 were, respectively, 67.5%, 71.0%, and 56.0%. Kentucky's data again reflect the smaller percentage of students using accommodations at the high school level that was noted by Thompson & Thurlow (1999) and by Trimble (1998).

Louisiana also provided data to NCEO on students using accommodations during its norm-referenced testing in 2000. In its report, it distinguishes between students in special education and students on Section 504 plans for accommodations. In each case, it lists the number tested who are *included in the averages* (these are students who either tested without any accommodations or with the large print edition, transferred answers, or individual/small group administration), and the number tested who are *excluded from the averages* (these are students who tested with the accommodations of Braille, answers recorded, extended time, communication assistance, repeated directions, or tests read aloud—except for Reading Comprehension—or any other accommodations to align with the student's daily instructional program). Table 8 shows the percentages of students included in the averages and excluded from the averages in Louisiana's norm-referenced test data. The slight trend toward higher percentages included in higher grades corresponds to lower numbers of students tested in the higher grades.

Table 8. Students Included and Excluded from Louisiana Averages Based on Accommodations Used

Student Group	Grade 3	Grade 5	Grade 6	Grade 7	Grade 9
Special Education Students					
Included in Averages	5.7%	5.8%	6.1%	7.7%	11.2%
Excluded from Averages	94.3%	94.2%	93.9%	92.3%	88.8%
Section 504 Students					
Included in Averages	12.8%	15.4%	18.2%	20.1%	22.6%
Excluded from Averages	87.2%	84.6%	81.8%	79.9%	77.4%

Note: Percentages are based on numbers tested in each grade. For special education students, the numbers tested were 4924, 5185, 5592, 5506, and 4738 for grades 3, 5, 6, 7, and 9, respectively. For 504 students, the numbers were 3646, 3487, 3168, 2658, and 1513, respectively for the same grades.

Nevada makes the distinction between regular testing conditions (which include students taking the test with "permissible" accommodations) and special conditions (which includes those using "special accommodations" that "impact the validity of the comparison against the national

norm sample." The percentage of students with IEPs using "not permissible" accommodations during Terra Nova testing was 22.7%, 27.3%, and 15.5% in grades 4, 8, and 10 respectively. [Nevada also reports on numbers of students with disabilities not tested – 31.0%, 20.7%, and 15.1%.] It is not possible to determine how many students with disabilities used approved accommodations in Nevada's Terra Nova testing.

South Dakota reported on the performance of IEP students on the SAT 9 during 1999 and 2000 (South Dakota Department of Education and Cultural Affairs, 2000). Data are separated into tables for standard administration, accommodated administration, and non-standard accommodations administration. South Dakota's data provide an interesting comparison among percentages of students in each condition across grades and across years (see Table 9).

Table 9. Percentages of South Dakota Students Tested in Three Conditions Across Two Years

Testing Condition	Grade 2		Grade 4		Grade 8		Grade 11	
	1999	2000	1999	2000	1999	2000	1999	2000
Standard	38.1	46.1	32.6	34.7	40.1	36.7	55.4	50.8
Accommodation	12.2	15.1	15.7	12.8	17.7	12.1	5.4	10.6
Non-Standard	49.7	38.8	51.7	52.5	58.4	51.1	39.2	38.6

Note: The percentages in this table were calculated from the total number of IEP students tested – no data were provided on the number of students who were not tested.

State Collection of Data on Accommodations Used

Background

Although there are no requirements to keep track of whether or which accommodations students use, there is interest in the field in knowing how many students are using accommodations. Erickson, Ysseldyke, Thurlow, and Elliott (1997) suggested that there are several benefits to be obtained from documenting the use of accommodations, one of which is to provide information for further research about the use of accommodations during testing. The recent settlement of a suit brought by students with dyslexia and their families supported the view that information on the use of accommodations should be tracked (Advocates for Special Kids—"ASK" vs Oregon Department of Education) if for no other reason than that by tracking the numbers we are also able to monitor them to see that they are "appropriate."

The fact that some states are already reporting data on the use of accommodations (or modifications or special testing conditions, or nonstandard administrations) indicates that these states have identified ways to collect data on accommodations used during assessments. However, the data that we have so far raise questions about how the data are being collected. There is very little comparability in the data that are reported, suggesting that there may be variability in the way that data are collected.

Data Source

NCEO is conducting a survey of states that asks how information is collected about the accommodations that students use on state assessments. In responding to the NCEO's online survey, states had the option of picking one of five responses, or selecting "other" and writing out an explanation. At the time that this paper was written, responses had been obtained from all but five states.

Results

The number and percentage of the 45 states selecting each of the options is shown in Table 10. As is evident here, nearly 50% of the responding states indicated that they had a form that is completed at the time of testing. Those states marking "other" gave explanations that fell into four basic types: (1) data collected at the IEP team meeting, then transferred into a state database to be connected later to test data; (2) some type of data collected on the test form, but not necessarily the accommodations themselves (three of these states indicated that either "standard" or "non-standard" was marked on the form); (3) data were collected in the past and will be collected again in the future, but were not collected this year; and (4) data maintained at the local level only. Four states noted that some indication of accommodations use was marked on the testing form, but not necessarily the specific accommodation.

Table 10. State Approaches to Collected Data on Accommodations Use During Assessments

Response Option	Number	Percent
No information collected.	10	22%
Form completed at time of testing indicates some or all accommodations a student uses	20	44%
Form completed at time of testing indicates only one accommodation student uses	2	4%
IEP information is coded on test form and verified at testing	5	11%
Our state has not made a decision about this yet	1	2%
Other	7	15%

Note: Percentages in this table are based on the 45 states responding to the NCEO survey (Thompson & Thurlow, 2001) at the time this paper was presented.

Discussion

The search for data on the use of accommodations in state assessments has been quite a search! Where before there were no data, there now are some data. The data that do exist at this point are of extreme variability in kind and in quality. With the increasing attention being given to the participation of students with disabilities in state assessments, and the belief that part and parcel

of this participation is the use of accommodations, it is critical that we know more about the extent to which accommodations are used, what kinds of accommodations are being used, and what is happening to scores when accommodations are used.

It is clear from the data presented here that, as we suspected, the accommodations that are most frequently allowed in statewide testing are not the ones that are most frequently used. What we perhaps did not already know is that there are some trends in the use of accommodations that may need exploration. Why is there a downward trend in most states in the use of accommodations as the grade level increases? Is it because students "grow out" of their need for accommodations? Is it because they become embarrassed to use accommodations that are available to them? Could it be that the environment becomes less accommodating – that teachers at the upper grades are less willing to provide accommodations in instruction and therefore they are no longer deemed appropriate for assessment? Or, are the students who received accommodations in the elementary grades no longer in school, and therefore no longer in need of accommodations? Why do these same trends not exist in all states?

It is important to acknowledge that this paper is a first attempt to look at the use of accommodations in more than a single state. Attempting to do this opens up numerous issues, and certainly makes the findings here preliminary at best. We know that some of the differences in use may be related to states' policies. Not only do some states allow more accommodations than others, but some states consider certain changes to be accommodations (that are counted) that other states (e.g., Kansas) consider to be part of natural testing conditions and therefore not counted as accommodations used.

Still, the dramatic differences in the use of accommodations raise additional issues for assessment programs. What is the best way to collect data on the use of accommodations? Is this something that should be marked on the testing form at the time of testing? Is the person administering the test the best one to document accommodations, or is it the student? Does this vary by age? Do we know that if an accommodation is marked it is really used?

The question of how IEP team decisions about needed accommodations are translated to assessment practice also emerges when thinking about assessment accommodations for students with disabilities. The IEP team often makes decisions about assessment accommodations several months before the assessment is administered. How is the IEP team decision carried forward to the day of testing? Is the decision always reflected in what happens during testing? To the extent that research on the effects of accommodations uses extant databases rather than experimental designs (Thurlow, McGrew, Tindal, Thompson, Ysseldyke, & Elliott, 2000), these questions become significant issues in our understanding of the effects of accommodations.

Finally, this look at available information on the use of accommodations has highlighted another important issue. What is happening to scores of those students who take assessments with

accommodations? Few states were as clear as Louisiana, so it is important to applaud Louisiana for reporting its data in a clear and concise manner. Louisiana clearly distinguished between those students who used accommodations on the state's norm-referenced test that allowed their scores to be aggregated with the scores of other students and those who used accommodations that did not allow their scores to be included. The "excluded" numbers were very large—ranging from 89% to 94% of students in special education. A quick glance at the scores of the students whose scores were not included indicated that most were below those of the scores that were included. Is this happening elsewhere, where we cannot see the data to know?

The continuing confusion surrounding the use of accommodations in assessments needs resolution. The first step toward that is to be sure that the data that are produced by states reveal what is really happening. Considering how best to code accommodations that students actually use during testing is one step in that direction.

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